

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)
2. (New) A process for manufacturing super capacitors storing electrical energy in resonance excited, crystalline, chemically dipolar nano-particles within an electrically insulating resin, comprising:
 - mixing fluid resin and nano-particles to obtain a mixture,
 - providing a compound film, said compound film comprising an isolated metallic foil,
 - applying said mixture onto said compound film by means of electrostatic spraying in order to obtain a coated film, whereby said metallic foil acts as a counter electrode, said electrostatic spraying generating an electrical field; and
 - forming geometrically exact layers and field-aligning said nano-particles by means of surface forces generated by said electrical field together with capacitive effects.
3. (New) A process according to claim 2, further comprising the step of cutting said coated film to obtain plural films, and arranging said films in layers to obtain a multi-layer sandwich structure.
4. (New) A process for manufacturing super capacitors storing electrical energy in resonance excited, crystalline, chemically dipolar nano-particles separated by an electrically insulating resin, comprising:
 - providing a carrier surface,

- alternately depositing a layer of nano-particles and a layer of resin onto said surface by means of chemical or physical vapor deposition in order to obtain a sandwich structure,
 - annealing said sandwich structure at a temperature of above 800°C for achieving a Rutile type crystal phase, and
 - cooling said sandwich structure.
5. (New) A process according to any one of claims 2 to 4, wherein said nano-particles are comprised of TiO₂.
 6. (New) A process according to claim 5, wherein said nano-particles are comprised of SiO₂.
 7. (New) A process according to any one of claims 2 to 4, wherein said resin is a polymer resin.
 8. (New) A process according to claim 7, wherein said resin is SiO₂.
 9. (New) A process according to claim 4, wherein said carrier surface is covered by a conductive material forming a bottom electrode.